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## Pandemic Outbreaks and the Language of Violence: Discussing the Origins of the Black Death and COVID-19

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Pandemic Outbreaks and the Language of Violence: Discussing the Origins of the Black Death  
and COVID-19

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**Abstract:** The outbreak of COVID-19 has brought renewed attention to past narratives of disease outbreaks. What do the Black Death and COVID-19 have in common? How we tell outbreak stories is shaped by political, cultural, social, and historical contexts. It is deeply rhetorical. The general public relies on experts (scientists, historians, government officials) to provide credible information, but uncertainties during an outbreak can make it difficult to provide definitive answers quickly. Experts need to be conscious about the contexts in which their statements would be received. With regard to the Black Death, historians of medicine have relied heavily on a single medieval account of the outbreak which confirmed their preconceptions about Mongol violence, allowing them to present the Black Death as an instance of biological warfare. Looking at other medieval accounts, however, makes clear that this narrative of Mongol biological warfare is false. Similarly, modern outbreak narratives also tend to use militarized language which results in othering peoples and cultures where a disease might have originated. Given contemporary political tensions between People's Republic of China and the U.S., narratives about the origin of the SARS-CoV-2 virus and its transmission have led to a transnational infodemic of misinformation as well as discrimination and violence against people of Asian descent. In light of this long-running pattern, we argue for more interdisciplinary collaborations between the experts whose work is used to build outbreak narratives in order to adopt more critical rhetorical approaches in communicating with the public.

**Keywords:** COVID-19, history, outbreak narratives, plague, rhetoric

## Introduction

Discourses about infectious diseases often embody sociopolitical tensions. These can be reflected in the treatment of people infected with the diseases, government-driven public health responses, the public's perceptions of the crisis, and the rhetoric of "us vs. them" that may lead to violence. The "outbreak narrative" has been defined by literary scholar Priscilla Wald as "a contradictory but compelling story of the perils of human interdependence and the triumph of human connection and cooperation, scientific authority and the evolutionary advantages of the microbe, ecological balance and impending disaster."<sup>1</sup> (p.2) We have seen this pattern appear in many public health crises, from villainizing Mary Mallon, the asymptomatic typhoid carrier, as "Typhoid Mary" in the early 20th century to blaming the whole gay community for the HIV/AIDS epidemic in the 1980s, as well as in dramatized portrayals of disease emergence and outbreaks in works such as the *New Yorker* article "Crisis of the Hot Zone" or *Outbreak*, focusing on describing the "microbial traffic" as one-way: "from the primordial rainforests of the impoverished developing world to the metropolitan centers of commerce and capital."<sup>1</sup> (p.34)

In outbreak narratives, the "perils of human interdependence" are often constructed as caused by an "other," a group who introduce the threat of a transmittable disease into an otherwise healthy community. Wald has shrewdly observed that infectious disease has an intimate relationship with national belonging.<sup>1</sup> (p.67) This was painfully evident during the COVID-19 pandemic through rampant anti-Chinese and anti-Asian rhetoric and hate crimes in the U.S. and globally, encouraged by national leaders and shaped by the broader context of a global post-truth era.<sup>2</sup> However, China's current position as a rising world power meant that its government was equally eager to take advantage of the "us vs. them" rhetoric to protect its global image by vilifying the U.S., complicating the global political dimensions of the COVID-19 response.

Similar dynamics are at play in the outbreak narrative constructed by historians for the second plague pandemic, the Black Death of 1346-1353. That narrative ties the early spread of the disease to a Mongol or Tatar army besieging the Genoese in Caffa, a port on the Crimean Peninsula. Plague was supposedly transmitted from besiegers to besieged via the bodies of dead Tatar soldiers catapulted over the walls; when the surviving Genoese fled by sea, they carried the disease to Europe. Although this outbreak narrative is based on just one historical source, the author of which was not even present at the siege, it has been accepted by historians who would normally demand more substantial evidence because it reinforces the commonly held association of Mongols with violence and otherness.

Both the COVID-19 and Black Death outbreak narratives reflect a form of demagogic rhetoric that blames an "other" for creating or spreading a disease, even while presenting apparently logical evidence. This essay will show that an identity-driven argument is central to both the Black Death and COVID-19 origin stories, casting blame on the "other" rather than emphasizing global collaborations to understand the origin of a global pandemic.

## The Black Death

Since the late nineteenth century, historians have relied on a single source to tell the outbreak story of the Black Death. According to Gabriele de' Mussi, the outbreak reached Europe via the Black Sea, where a Mongol or Tatar army was besieging the Genoese port of Caffa. "The whole army was affected by a disease which overran the Tartars and killed

thousands upon thousands every day... the dying Tartars, stunned and stupefied by the immensity of the disaster brought about by the disease, and realising that they had no hope of escape, lost interest in the siege. But they ordered corpses to be placed in catapults and lobbed into the city in the hope that the intolerable stench would kill everyone inside.”<sup>3 (p.17)</sup> Taking this account at face value, many scholars have therefore characterized the Black Death as an act of violence by Tatars against Italians, sometimes presenting it as an early instance of biological warfare.<sup>4 (p.99)</sup>

There are two fundamental flaws in this story. First, recent research on *Yersinia pestis*, the bacterium that causes plague, has made clear that the second pandemic did not begin in the 1340s. It began instead around 1196 or 1268 when *Y. pestis* underwent a polytomy, a sudden divergence of several new genetic strains, one of which has been connected with plague fatalities from the Black Death.<sup>5-8</sup> Once historians, thus directed, began to look for plague in thirteenth-century as well as fourteenth-century sources, they found promising signs in Daliang in 1232; in Baghdad in 1258; and in the Horn of Africa in 1262 and 1274-1275.<sup>9-11</sup>

Yet genetics research was not necessary to prove the old outbreak narrative false. A cardinal principle of historical research is to seek sources that were written close in time and space to the events that they describe. By this standard, Mussi is not a good source for the 1346 plague outbreak. He worked as a notary; it is thus easy to demonstrate that he did not witness the siege or plague outbreak in Caffa because the dating clauses on his documents show that he stayed in Piacenza between 1344 and 1356.

A more reliable outbreak story would draw instead on texts composed by people who were present in the Black Sea in the mid 1340s. For example, the inhabitants of Caffa sent a petition to the doge of Genoa in February or March 1347, immediately after the Tatar siege described by Mussi. They explained that the Tatar army had experienced a severe disease outbreak just before lifting the siege, and they expected that they too would be affected in the near future. In other words, plague transmission from Tatars to Italians occurred not in a military context *during* the siege, but in a peaceful context *after* the siege. Peacetime plague transmission was connected with the resumption of the regional grain trade, first to the inhabitants of Caffa whose access to food had been restricted during the siege and then to the Mediterranean which was importing food after two failed harvests in 1346-1347.<sup>4</sup>

Unlike the biological flaw in the Black Death narrative which has become clear only recently, the historical flaw should have been apparent for decades. A.G. Tononi demonstrated in 1884 that Mussi could not have been a direct witness to the siege of Caffa.<sup>12</sup> Giovanna Petti Balbi published the full text of the Caffan petition in 1978.<sup>13</sup> Why did so many historians nevertheless choose to base their outbreak narrative on Mussi’s account?

One reason may be the attraction of demagogic rhetoric. Historians may have preferred Mussi’s treatise because it accorded with their preconceptions about Mongol otherness and violence. Such preconceptions have both medieval and modern roots. On the medieval side, our understanding of the Mongols is built almost entirely on records created by the people they conquered, which naturally emphasize Mongol otherness and violence. Further, the Mongols, as nomads who preserved their mobility even as they created an empire, were less invested in the creation and storage of written records. Many of the records they did create were destroyed by subsequent dynasties. As a result, we lack the nuanced understanding of Mongols’ self-image that could counterbalance their neighbors’ depictions of them as violent “others.”

On the modern side, the people of the Golden Horde, the Mongol state located north of the Black and Caspian Seas, fall awkwardly between two present-day ethnic categories. As “Asians,” the Golden Horde may be lumped together with people ranging from India to China.

Yet although the Golden Horde's ruling class claimed Mongol lineage, their subjects came from a wide range of backgrounds, including many Slavic and Turkic speakers whose ancestors had lived in the region well before the Mongol era. At the same time, as "Muslims," the Golden Horde may be lumped together with people ranging from Saladin to the 9/11 terrorists. Yet the Golden Horde fits uneasily into modern stereotypes about Islam since its rulers did not speak Arabic, claim an Arab genealogy, or reside in the Middle East. Although its rulers converted to Islam as part of an alliance with the Mamluk kingdom, their subjects professed a variety of religions, most notably Orthodox Christianity.

These complicating factors have not hindered medieval or modern commentators. We know that the immediate cause of the 1346 siege of Caffa was a three-way dispute between the Golden Horde, Venice, and Genoa over sovereignty and tax revenue in Black Sea ports.<sup>4</sup> Throughout this dispute, all parties remained aware that the prosperity of the ports over which they were fighting depended on trade across religious and ethnic boundaries. Medieval observers such as Mussi nevertheless presented the siege as a conflict between an ethnic group (Tatars) and a religious group (Christians), casting an ethnic aspect onto Christianity and a religious aspect onto Tatarism in order to tie the siege into a broader pattern of holy war. Modern scholars have made similar analytical moves. For example, according to Ole Benedictow, the Golden Horde's conversion to Islam "involved increased religious fervour and fulminating anti-Christian attitudes, and the presence of Christian merchants was considered increasingly intolerable," culminating in the rulers' decision "to throw the Italians out of their trading stations in Caffa and Tana in order to put a definite end to trade with Christians."<sup>14</sup> Benedictow therefore argued that violent confrontation must have been responsible for plague transmission because no sane Christian merchant would have been doing business in such a hostile environment. In the meantime, historians of the Black Sea have proceeded under the assumption that plague was spread via the grain trade without realizing that the very existence of that grain trade was being questioned by historians of medicine.<sup>15</sup>

### *COVID-19*

Treating the Black Death as an instance of biological warfare reflects the long history of politicized outbreak narratives. In today's "post-truth era", we might treat Mussi's account as disinformation. Although Mussi probably did not intend to mislead, his narrative has enabled modern academic parochialism and reinforced problematic modern assumptions about interreligious and interethnic conflict as a factor in disease transmission. The research reliant solely on his account has created a "disnarrative" about the Black Death outbreak which favors an "us vs. them" interpretation often associated with infectious disease outbreaks. A similar pattern has been observed in the construction of narratives about the origin of the COVID-19 virus from the United States and China.

Both the American and Chinese governments took advantage of the type of scientific uncertainties especially common in ongoing epidemiology research about new viruses and epidemics in order to advance a kind of demagogic rhetoric for their own political gains, ramping up nationalistic sentiments among their citizens. According to Patricia Roberts-Miller, a scholar of rhetoric and public writing, demagoguery should be understood as "a discourse that promises stability, certainty, and escape from the responsibilities of rhetoric through framing public policy



in terms of the degree to which and means by which (not whether) the outgroup should be punished for the current problems of the ingroup.”<sup>16</sup> What’s important in Roberts-Miller’s definition is that demagogic rhetoric is centered on group identity even if it often appears to be rational and evidence-based. Combined with nationalism, an outbreak narrative’s tendency to vilify disease carriers and marginalize them for the benefit of the “public good” reflects several characteristics of demagogic rhetoric. When politicians use belligerent arguments to play a blaming game, attention is drawn away from the complexity of scientific research toward political war.

One of the most contested origin theories of the COVID-19 pandemic suggests that the virus was leaked from a lab. The U.S. government was first to advance this theory by suggesting it leaked from the Wuhan Institute of Virology (WIV). This theory—first dismissed as a conspiracy theory partly due to Trump’s xenophobic comments against China earlier in 2020—is now regaining scientific and media attention.<sup>17</sup> On the other hand, the Chinese government has woven its own origin narrative in a similar vein, suggesting that the virus could actually have been leaked from a research lab in the U.S. military base Fort Detrick.<sup>18</sup>

Between these two theories, the Wuhan lab leak theory has certainly caused more controversy, even within the scientific community.<sup>19,20</sup> While it was initially suggested with xenophobic intentions, more recent evidence has suggested that WIV was involved in conducting “gain-of-function” research and was experimenting with coronaviruses that could infect humans, reviving interest in this theory.<sup>21,22</sup> The goal here is neither to endorse nor debunk the “Wuhan lab leak theory” since investigations are still ongoing and we may never be able to confirm it for sure given the lack of transparency. Rather, we argue for critical attention to how to construct a narrative about this theory.

Recently, the U.S.’s House of Foreign Affairs Committee Minority Staff led by Republican Michael T. McCaul published a report to advocate for the Wuhan lab-leak theory.<sup>23</sup> McCaul’s report on the virus’s origin was written to appeal to national pride and identity, by justifying the Committee’s motivation to investigate as a responsibility “to the American people.”<sup>23 (p.3)</sup> ( In this report, evidence of a lab leak was contextualized with a description of the Chinese communist party’s presence at the Wuhan Institute of Virology, strongly signaling McCaul’s interest in Chinese political influence on and military involvement in the lab’s work. Finally, the report ended with recommendations that are more politically than epidemiologically motivated, such as reviewing the visas of Chinese nationals researching and studying in the U.S. The lack of transparency from China on the activities of the Wuhan Institute of Virology is not surprising given its track record, but constructing the Wuhan lab leak theory as an attack on China and Chinese nationals does not accurately portray the nuances and complexities of the issue. Rather, it perpetuates demagogic rhetoric, blaming an outgroup (Chinese people) for the problems of an ingroup (American people). Politicized demagogic discourse like this risks intensifying xenophobic actions and policies.

In response to the U.S.’s persistent push for the Wuhan lab leak theory, the Chinese government has woven its own misinformation campaign arguing that the virus could have been leaked from a research lab in Fort Detrick. This example seems much less plausible and more demagogic. Two videos supported or created by the Chinese central television station and circulated on



China's main social media platform, Sina Weibo, have constructed a narrative about the evil nature of Fort Detrick using a variety of evidence in order to suggest it as the source of the SARS-CoV-2 virus. One video highlights Fort Detrick's history in working with Japanese researchers from Unit 731 (a notorious bioweapon research team who experimented on Chinese people during World War II), effectively evoking strong nationalist sentiments among the Chinese audience.<sup>24</sup> Referencing critiques from the American public, including an article from the *New York Times* and another from the *Washington Post* that condemned the U.S. government, this video aimed to build a trustworthy ethos, while establishing Fort Detrick as a target. The other video edited together testimonies from WHO experts exonerating China and appreciating its collaboration in the COVID-19 origin investigation with a U.S. news story about Fort Detrick's environmental damage to local communities to directly suggest its possible role in creating or leaking the virus.<sup>25</sup> Neither of these videos present any plausible evidence that connects Fort Detrick directly with COVID-19, yet both contribute to an "affective economy"<sup>26</sup> of hate and anger toward the U.S. on Chinese digital media.

Both examples from the U.S. and China reflect a kind of demagogic rhetoric that aims to blame the other country for creating and/or leaking the SARS-CoV-2 virus, by presenting circumstantial and misleading evidence that appears to be logical but still contains logical fallacies. Driven by identity-centered arguments, both examples are polarizing narratives that sowed seeds of doubt, promoting certainty on uncertain things, in order to feed antagonistic attitudes among citizens from the two countries.

### *Conclusion*

What can we learn from the misrepresentation of the Black Death outbreak story and the COVID-19 lab leak debate? It is important to acknowledge that research often produces uncertainty and that conclusions are contingent on limited evidence. In communicating specialized knowledge, we need to make clear that research requires an open, ongoing process. This is difficult, but transnational and transdisciplinary collaborations among scholars, media outlets, and public health agencies can promote more effective communication about the research process as well as its results.

Even though a virus may not discriminate in its infection, the experience of its impact may vary widely across different populations. Communications about transmittable diseases are often couched in terms of supporting all those who are impacted, but a disaster for some can provide an opportunity for others. It is essential for the public to understand the structural and ideological forces that shape both the impacts of a disease outbreak and our perceptions of those impacts. Discussions about public health crises, even within scientific and medical fields, should not ignore differences in impact and perception but make them apparent. Francis Collins, former director of the NIH, was alarmed by the misinformation and the politicization of science surrounding COVID-19.<sup>27</sup> His comments indicate a recognition within the scientific and public health communities that science communication is affected by factors such as group identification, culture, politics, and history – an opportunity for dialogue with scholars of the rhetoric and history of science.

## References

1. Wald, P. (2008). *Contagious: Cultures, Carriers, and the Outbreak Narrative*. Durham, NC: Duke University Press. <https://doi.org/https://doi.org/10.1215/9780822390572>
2. Sotgiu, G., & Dobler, C. C. (2020). Social stigma in the time of coronavirus disease 2019. *European Respiratory Journal*, 56(2), 1–3. <https://doi.org/10.1183/13993003.02461-2020>
3. Horrox, Rosemary, ed. *The Black Death*. Manchester, 1994.
4. Barker, Hannah. “Laying the Corpses to Rest: Grain Embargoes and the Early Transmission of the Black Death in the Black Sea, 1346-1347,” *Speculum* 96, no. 1 (2021): 97-126.
5. Green, Monica. “The Four Black Deaths,” *The American Historical Review* 125, no. 5 (2020): 1601-1631.
6. Spyrou, Maria A., Rezeda I. Tukhbatova, Chuan-Chao Wang et al., “Analysis of 3800-Year-Old *Yersinia pestis* Genomes Suggests Bronze Age Origin for Bubonic Plague,” *Nature Communications* 9/1 (2018): 1–10 at 8, Supplementary Table 9.
7. Cui, Yujun, Chang Yu, Yanfeng Yan et al., “Historical Variations in Mutation Rate in an Epidemic Pathogen, *Yersinia pestis*,” *Proceedings of the National Academy of Sciences of the United States* 110/2 (2013): 577–82 at 580, Table 1.
8. Spyrou, Maria A., Marcel Keller, Rezeda I. Tukhbatova et al., “Phylogeography of the Second Plague Pandemic Revealed through Analysis of Historical *Yersinia pestis* Genomes,” *Nature Communications* 10 (2019): 1–13.
9. Hymes, Robert. “Epilogue: A Hypothesis on the East Asian Beginnings of the *Yersinia pestis* Polytomy,” *The Medieval Globe* 1 (2015): 285–308.
10. Fancy Nahyan, and Monica Green, “Plague and the Fall of Baghdad (1258),” *Medical History* 52, no. 2 (2021): 157-177.
11. Derat, Maire-Laure. “Du lexique aux talismans : occurrences de la peste dans la Corne de l’Afrique du XIIIe au XVe siècle,” *Afriques* 9 (2018). <https://doi.org/10.4000/afriques.2090>
12. Tognoni, A. G. “La peste dell’anno 1348,” *Giornale linguistico di archeologia, storia e letteratura* 11 (1884): 139–52.
13. Petti Balbi, Giovanna. “Caffa e Pera a metà del Trecento,” *Revue des études sud-est européennes* 16 (1978): 217–28.
14. Benedictow, Ole. *The Black Death, 1346-1353: The Complete History* (Woodbridge: Boydell Press, 2004).
15. Karpov, Sergei. “Black Sea and the Crisis of the Mid XIVth Century: An Underestimated Turning Point,” *Thesaurismata* 27 (1997): 68
16. Roberts-Miller P. Characteristics of Demagoguery. Patricia Roberts-Miller. Published . Accessed November 21, 2021. <https://www.patriciarobertsmiller.com/characteristics-of-demagoguery/>
17. Elliott P. How Distrust of Donald Trump Muddled the COVID-19 ‘Lab Leak’ Debate. Time. Published May 26, 2021. Accessed November 21, 2021. <https://time.com/6051414/donald-trump-wuhan-laboratory-leak/>
18. Griffiths J & Xiong Y. As the WHO Investigated Coronavirus Origins in China, Beijing Pushed a Conspiracy about the U.S. CNN. Updated February 18, 2021. Accessed November 21, 2021. <https://www.cnn.com/2021/02/18/asia/china-coronavirus-disinformation-fort-detrick-intl-hnk/index.html>

19. Maxmen A. Divisive COVID ‘Lab Leak’ Debate Prompts Dire Warnings from Researchers. *Nature*. Published Mar 27, 2021. Accessed November 21, 2021. <https://www.nature.com/articles/d41586-021-01383-3>
20. Bloom J. D, Chan Y. A, Baric P. S, et al. Investigate the Origins of COVID-19. *Science*. 2021;372(6543),694. <https://www.science.org/doi/10.1126/science.abj0016>
21. Kormann C. The Mysterious Case of the COVID-19 Lab-Leak Theory. *The New Yorker*. Published October 12, 2021. Accessed November 21, 2021. <https://www.newyorker.com/science/elements/the-mysterious-case-of-the-covid-19-lab-leak-theory>
22. Lerner S, Hvistendahl M. NIH officials Worked with Ecohealth Alliance to Evade Restrictions on Coronavirus Experiments. *The Intercept*. Published November 3, 2021. Accessed November 21, 2021. <https://theintercept.com/2021/11/03/coronavirus-research-ecohealth-nih-emails/>
23. House Foreign Affairs Committee Report Minority Staff. The origin of COVID-19: An investigation of the Wuhan Institute of Virology. Published August, 2021. Accessed November 21, 2021. <https://doi.org/10.31826/9781463236762-toc>
24. 美国德堡生物实验室暗史：继承‘731部队’遗产(The Dark History of the U.S. Fort Detrick Biology Lab: Inheriting the Legacy of ‘Unit 731.’ *The Paper*. Published July 17, 2020. Accessed November 21, 2021. <https://weibo.com/5044281310/JbK0mnCIw?type=comment>
25. 美媒曝德特里克堡真相(U.S. Media Reveals the Truth of Fort Detrick). *CCTV News*. Published August, 2021. Accessed November 21, 2021. [https://weibo.com/tv/show/1034:4669855027363895?from=old\\_pc\\_videoshow](https://weibo.com/tv/show/1034:4669855027363895?from=old_pc_videoshow)
26. Ahmed S. (2015). *The Cultural Politics of Emotion* (2nd edition). Routledge.
27. Subbaraman, Nidhi. “Science misinformation alarms Francis Collins as he leaves top NIH job.” *Nature* 600 (2021): 372-373. Accessed February 11, 2022. <https://www.nature.com/articles/d41586-021-03611-2>